

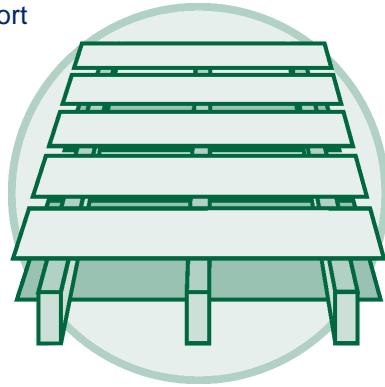


Fact Sheet

South Carolina's Business RECYCLING Assistance Program

Managing Pallets



Pallets are used to transport goods throughout the United States. More than 600 million pallets were manufactured in 1998, 90 percent of which were wooden. The remaining 10 percent consist of corrugated paperboard, metal or plastic.




As timber prices and disposal fees have risen, many businesses are looking for better ways to manage their pallet usage. Reducing the number of pallets used, repairing damaged ones, and recycling pallets are just a few of the possibilities. In South Carolina, there are a number of companies who repair or recycle wooden pallets. You can call the Office of Solid Waste Reduction and Recycling for contacts in your area at **1-800-768-7348**.


Before determining which method fits your business needs, you should look closely at the lifecycle of pallets at your facility. You'll need to consider what size and types of pallets are used and how many are purchased, shipped in, shipped out, returned and/or disposed. Then calculate costs incurred from pallet purchase, maintenance, retrieval and disposal. Once you have these numbers in hand, you can better determine whether reduction, reuse or recycling, or possibly a combination of these options, is best for your bottom line.

Pallet Waste Reduction Options

-  **Suppliers can take pallets back.** You could require suppliers to take back their pallets from previous shipments. You also could consider charging a disposal fee for pallets that are not taken back.
-  **Your drivers can pick up pallets** from previous shipments or pallets that are similar to the ones your company uses. You'll save money, reduce the number of new pallets needed and promote reuse. If finding pallets at the time of pick up is a problem, then consider a fee system. You charge customers

a fee for each pallet that is not returned to your facility. A disadvantage to this system is the amount of time you're paying a driver to hunt down and load comparable pallets.

-  **Use high quality pallets.** They are easier to repair and more likely to be reused again and again. The cost per trip of higher quality pallets tends to be lower than cheap pallets because they can withstand more trips before needing repair. Companies that use higher quality, repairable pallets also can save as much as \$3 to \$4 per pallet by fixing them in-house.

-  **Design a palletless system.** Consider using slip sheets, reusable containers, recyclable top and bottom cardboard covers and rolling carts as alternatives to pallets. These products are usually tailored to fit your company's needs and are often reusable, recyclable and easy to clean.

- **Slip Sheets.** Slip sheets are flat sheets, 1/32" to 1'16" thick, made from corrugated paper, solid fiber or plastic (usually polypropylene {PP} or high density polyethylene {HDPE}). Each sheet has one to four "tabs" that run the length of the sheet and are bent upwards for grabbing by push/pull attachments. They may be custom designed for thickness, size, number of tabs and coatings for tensile strength, slip resistance and moisture resistance. Slip sheets are best used in a warehouse/distribution center.
- **Reusable Containers.** Reusable containers, usually made out of plastic, corrugated paper, solid fiber or metal, have many appealing features, including strength, durability and cleanliness. They can be ordered to fit your company's needs, including size, shape, color, partitions and reusable cushioning systems as well as being stackable, nestable or collapsible for return.
- **Rolling Carts.** Made from heavy-duty plastic or metal, rolling carts can be tailored to fit odd-shaped products with considerably less protective packaging. They tend to save labor

and reduce labor injury claims since they are easier to work with than pallets. Savings on labor, injuries and protective packaging often can pay for these carts in one year.

Pallet Reuse Options

Pallets made from plastic, metal or composite materials are a long-lasting alternative to wooden pallets. All three types are durable, reusable, easy to clean and recyclable. Despite higher initial costs, these pallets can save your business money in the long run. They usually meet both USDA and FDA standards for pharmaceutical, chemical, grocery and food processing operations since they can be sanitized and steam cleaned. They also exhibit low breakage rates and work well with automated material handling systems. Since these pallets have no nails, staples or broken boards, product damage is reduced while employee safety is increased.

Plastic, composite and metal pallets are best used in a closed loop or slave system where shipping is restricted to moving goods within or between specified plants and facilities. Closed loop systems work best when shipments travel short distances, are made to the same customer or a limited number of customers, and/or deliveries are made with your company's vehicles.

Pallet Standardization

Standardizing pallet sizes promotes reuse and recycling. You can work with vendors to supply incoming materials on pallets that can be reused to ship out your company's products. A change in pallet size may require modifications to racking, storage facilities, or product orientation, but the savings may be worth it. Using one standard size may not only reduce the number of pallets needed but also reduces labor costs associated with sorting different pallet sizes.

Repair Pallets

Adding new nails, metal brackets or replacing broken boards can often repair broken pallets. Pallet handlers can be trained to provide minor or major repairs to

broken pallets for a fraction of the cost of buying new ones.

Pallet Recycling

Pallet repair and pallet recycling are two words that are often incorrectly interchanged. Companies that repair pallets are usually labeled pallet recyclers although their main goal is to repair and rebuild pallets. Pallet repair is the restoration of broken pallets to working condition.

If pallets are not suitable for reuse or repair, then they can be recycled. Recycling usually entails grinding the pallets to wood fiber for use as landscape mulch, playground cushion/bedding, animal bedding, compost soil amendment or biomass fuel. Many companies that offer pallet repair services also are capable of pallet recycling.

Third Party Management

Third-party pallet management companies and networks of individual pallet companies provide an efficient alternative for companies by matching pallet manufacturers with pallet repair and recycling companies. They either manage a user's existing pool of pallets or provide rental pallets on a per trip basis. The management company tracks pallets throughout their usage and retrieves them for reuse or refurbishing.

Exchange or Donate Pallets

One way to handle excess pallets is through business exchanges. These arrangements can be made by businesses themselves or facilitated by local government recycling coordinators.

Businesses also can donate wooden pallets to facilities that chip pallets for use as fuel, mulch, compost or animal bedding if the pallets are not treated or contaminated with hazardous or toxic residuals. Companies with small numbers of pallets can give clean scrap pallets to employees and others for building projects and/or firewood. A small classified ad in the paper can generate demand.